In the Claims

1. [Once Amended]

a)

c)

amplimers,

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method of making a mixture of VNTR alleles and their flanking regions of the genomic DNA of one or more members of a species of interest, which method comprises the steps of:

- dividing genomic DNA of the species of interest into fragments,
- b) ligating to each end of each fragment an adapter thereby forming a mixture of adapter-terminated fragments in which each 3'-end is blocked to prevent enzymatic chain extension,

contacting [using] à portion of the mixture of adaptor-terminated

fragments [as templates] with an adapter primer and a VNTR primer wherein said portion of the mixture of adaptor terminated fragments serves as a template to create a mixture of 5!-flanking VNTR amplimers;

d) contacting [using] a portion of the mixture of adaptor-terminated fragments [as templates] with an adaptor primer and a VNTR antisense primer wherein said portion of the mixture of adaptor terminated

fragments serves as template to create a mixture of 3'-flanking VNTR

e) and producing a desired mixture of VNTR alleles and their flanking regions by contacting [using] genomic DNA of the one or more members of the species of interest [as template] with the mixture of 5'-flanking VNTR amplimers and/or the mixture of 3'-flanking VNTR amplimers as

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primers [to make the desired mixture of VNTR allele and their flanking regions] wherein said genomic DNA of the one or more members of the species of interest is used as template.

- 11. [Once Amended] An isolated portion of genomic DNA of one or more members of a species of interest, said portion consisting essentially of a representative mixture of alleles of a chosen VNTR sequence and their flanking regions on both sides and which is representative of that member or members
- 12. [Once Amended] The <u>isolated</u> portion as claimed in claim 1, wherein the mixture of alleles is representative of those which manifest a trait of interest.

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- 13. [Once Amended] The <u>isolated portion</u> as claimed in claim 11, wherein each member of the <u>representative</u> mixture <u>of alleles</u> has an adaptor at each of its 3'-end and its 5'-end.
- 14. [Once Amended] An isolated portion of genomic DNA of one or more members of a species of interest, said portion consisting essentially of a single VNTR allele and its flanking regions and an adaptor at each of its 3'-end and its 5'-end, said allele being characteristic of those which manifest a trait of interest.
- 15. [Once Amended] An isolated portion of genomic DNA of a species of interest, said portion consisting essentially of a representative mixture of 3'-flanking regions of a chosen VNTR sequence, each member of the mixture carrying an adaptor at its 3'-end, and a

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representative mixture of 5'-flanking regions of a chosen VNTR sequence, each member of the mixture carrying the same adaptor at its 5'-end.

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19. [Once Amended] The method of claim [16] 17, wherein at least one VNTR allele and its flanking sequence representative of those which manifest the trait of interest, is hybridised with a mixture of VNTR alleles and their flanking sequences representative of those which do not manifest the frait of interest, and at least one match and/or at least one mis-match is selected to provide at least one VNTR allele or fragment thereof which is characteristic of the trait of interest.

21. [Once

21. [Once Amended] A method of making a mixture of amplimers which method comprises the steps of

- a) dividing genomic DNA of one or more members of a species of interest into fragments,
- b) ligating to each end of each fragment an adaptor thereby forming a mixture of adaptor-terminated fragments in which each 3'-end is blocked to prevent enzymatic chain extension, and
- c) contacting [using] a portion of the mixture of adaptor-terminated fragments [as templates] with an adaptor primer and a VNTR primer wherein said portion of the mixture of adaptor terminated fragments serves as a template to create a mixture of 5'-flanking VNTR amplimers, and/or
- d) [using] a portion of the mixture of adaptor-terminated fragments [as templates] with an adaptor primer and a VNTR antisense primer wherein